

**LOUKIA D. LOUKOPOULOU, Ph. D.**

Aviation Psychologist, Human Factors Researcher

**EDUCATION**

1997	University of Massachusetts Amherst, MA, USA	<i>Ph.D., Cognitive Psychology (minors: statistics and exercise science)</i>
1994	University of Massachusetts Amherst, MA, USA	<i>M.S., Cognitive Psychology</i>
1991	Clark University Worcester, MA, USA	<i>B.A., Psychology (minors: biology and computer science)</i>

**SPECIALIZATION**

1998	Naval Operational Medicine Institute Pensacola, FL, USA	<i>Aerospace Experimental Psychology U.S. Naval Flight Surgeon Training</i>
------	--	---

**MILITARY SERVICE**

1997-2003	United States Navy, Aerospace Experimental Psychologist Voluntary separation (honorable discharge) with the rank of <i>Lieutenant Commander</i>
-----------	--

**PROFESSIONAL EXPERIENCE**

2000-present	National Aeronautics and Space Administration (NASA) Ames Research Center, Human Systems Integration Division, Moffett Field, CA, USA 2000-2004 <i>Senior Research Associate</i> 2004-present as a <i>San Jose State University Foundation researcher</i>
2010-present	Kratis Training and Consulting Ltd., Nicosia, Cyprus <i>Senior Consultant</i>
2005-2010	Hellenic Air Accident Investigation and Aviation Safety Board <i>Human Factors consultant</i>
2004-present	Aviation Safety Officer School, Hellenic Air Force <i>Human Factors Instructor</i>
2006-2009	Hellenic Institute of Transport, Center for Research and Technology <i>Research Scientist</i>
2005-2006	Member of the Investigation Team of the Helios Airways flight #522 accident that occurred at Grammatiko, Greece on 8/14/2005
1998-2000	Naval Operational Medicine Institute, Pensacola, FL, USA <i>Personnel Selection Division Officer</i>

**RESEARCH & OTHER INTERESTS***(with NASA Ames Research Center)*

- Cognitive analysis of the demands of the routine flight environment:
  - Jumpseat observation of flight crews during passenger-carrying flights on B-737 type aircraft,
  - Analysis of routine concurrent task demands, interruptions, and distractions and their effects on flight crew performance,
  - Analysis of Flight Operational Manuals and the effectiveness of procedures in the operational setting,
  - Identification of operational factors that increase pilots' vulnerability to error.
- Consultation to air carriers on:
  - the use of voluntary incident report databases to identify critical crew performance issues
  - the (re)design of normal procedures to best reflect operational reality and protect flight crews from inadvertent errors.

(with Kratis Training & Consulting Ltd).

- STAMINA-BPM (European Commission – funded project) : adaptation of a Human Factors training program from aviation maintenance to the Biotechnology and Pharmaceutical industry.
- Development of e-learning programs for Human Factors and Safety Management System (SMS) training for aviation industry clients.
- Training and consultation services on the implementation of Safety Management Systems to air carriers.

(with the Hellenic Institute of Transport)

- HILAS (European Commission – funded project): development of programs and tools for the integration of Human Factors in the Lifecycle of Aviation Systems.

(with the Hellenic Air Accident Investigation and Aviation Safety Board)

- Aircraft accident and incident investigation and analysis, focusing on human factors issues.

## **BOOKS**

---

Loukopoulos, L.D., Dismukes, R.K., & Barshi, I. (2009). *The Multi-Tasking Myth: Handling Complexity in Real-World Operations*. Aldershot, UK: Ashgate Publishing Limited.

Dismukes, R.K., Berman, B., & Loukopoulos, L.D. (2007). *The Limits of Expertise: Rethinking Pilot Error and the Causes of Airline Accidents*. Aldershot, UK: Ashgate Publishing Limited.

## **PUBLICATIONS**

---

Barshi, I., & Loukopoulos, L.D. (in press). Training for Real-World Job Performance. Chapter 14 in *Training Cognition: Optimizing Efficiency, Durability, and Generalizability*, A. F. Healy & L. E. Bourne, Jr. (Eds.). Psychology Press.

Loukopoulos, L. D. (2010). *Air Traffic Controllers do it too! Hindsight*, a journal of Eurocontrol, 48-51.

Loukopoulos, L. D., Dismukes, R. K., & Barshi, I. (2009, August). The perils of multitasking. *AeroSafety World*. A Journal of the Flight Safety Foundation, 18-23.

Dismukes, R.K., Berman, B., & Loukopoulos, L.D., (2009). Converging themes: the deep structure of accidents. Chapter 4 in R. Key Dismukes (Ed.), *Human Error in Aviation*, Aldershot, UK: Ashgate Publishing Limited.

Loukopoulos, L. D. (2009, July). *Pilot error: challenges of the routine operational environment*. Chapter 1 in K.W. Kallus, C. Bauer, M. Dumuendzic, S. Haberschek, D. Jeloucan, B. Streit, & C. Vogrincic (Eds.). *Aviation Psychology in Austria: Human Factors and Resources*. Wien, Austria: Facultas AG.

Loukopoulos, L. D. (2008, October). *Pilot error: All skilled experts make mistakes*. Working on Safety Conference, 4th International Conference, Prevention of Occupational Accidents in a Changing Work Environment, Ηράκλειο.

Marantidou, O., Loukopoulou, L., Zervou, E., Martinis, G., Egglezou, A., Fountouli, P., Dimoxenous, P., Parara, M., Gavalaki, M., & Maniatis, A. (2007). Factors that motivate and hinder blood donation in Greece. *Transfusion Medicine*, 17, 1-8.

Loukopoulos, L.D., Dismukes, R.K., & Barshi, I. (2003). The challenge of routine flight operations. *Proceedings of the 22<sup>nd</sup> European Conference on Human Decision Making and Manual Control*, Linköping, Sweden.

Dismukes, R.K., Loukopoulos, L.D., & Barshi, I. (2003). Concurrent task demands and pilot error in airport surface operations. *Proceedings of the Flight Safety Foundation 56<sup>th</sup> Annual International Air Safety Seminar*, Washington, DC.

- Loukopoulos, L.D., Dismukes, R.K., & Barshi, I. (2001). Cockpit interruptions and distractions: A line observation study. *Proceedings of the 11<sup>th</sup> International Symposium on Aviation Psychology*, Columbus, Ohio, USA.
- Dismukes, R.K., Loukopoulos, L.D., & Jobe, K. (2001). The challenges of managing concurrent and deferred tasks. *Proceedings of the 11<sup>th</sup> International Symposium on Aviation Psychology*, Columbus, Ohio, USA.

## **PRESENTATIONS**

---

- Barshi, I., Degani, A., Loukopoulos, L., & Mauro, R. (2011). *Operational Procedures: Designed to be used by humans*. International Symposium on Aviation Psychology, Dayton, OH, USA (Panel presentation).
- Barshi, I., Degani, A., Loukopoulos, L.D., & Mauro, R. (2010, November). *Reality Check: Procedures for real flight operations*. Delta Airlines, Atlanta, Georgia, USA. (2 day workshop with Barshi, I., Degani, A., & Mauro, R).
- Loukopoulou, L. (2010, September). Analysis of Human Error – accident of flight HCY522 of Helios Airways on 8/14/2005. 6<sup>th</sup> International Conference of Aerospace Medicine, Thessaloniki, Greece.
- Loukopoulos, L.D., Dismukes, R. K., & Barshi, I. (2009, November). *New Technologies, Same issues*. 5th Line Operations Symposium at Singapore Airlines, Singapore.
- Loukopoulos, L.D., Dismukes, R. K., & Barshi, I. (2009, November). *The Hidden Complexity of Cockpit Operations*. 62nd International Air Safety Seminar of the Flight Safety Foundation, Beijing, China.
- Loukopoulos, L. D. (2009, July). *Pilot error: Challenges of the routine operational environment*. International Summer School on Aviation Psychology, Graz, Austria.
- Loukopoulos, L.D. (2009, March). *The Hidden Complexity of Cockpit Operations*. 21<sup>st</sup> Annual European Aviation Safety Seminar of the Flight Safety Foundation. Nicosia, Cyprus.
- Loukopoulos, L.D. (2008, October). *Pilot error: all skilled experts make mistakes*. Working on Safety Conference, 4th International Conference, Prevention of Occupational Accidents in a Changing Work Environment, Herakleion, Crete, Greece.
- Loukopoulos, L.D. (2008, August). *Even pilots get interrupted!* American Psychological Association, 166th Annual Convention, Boston, Massachusetts, USA.
- Loukopoulos, L.D. (2008, June). *Human Error Analysis - Accident of flight HCY522 on 14/8/2005* ICARUS Aero Expo, 1<sup>st</sup> International Aviation Exhibition, Athens, Greece.
- Loukopoulos, L.D. (2008, May). *Pilot error: challenges of the routine operational environment*. IFALPA/SEPLA Safety Seminar, Barcelona, Spain.
- Loukopoulos, L.D. (2007, July). *Pilot error in routine operations*. Instructor at the International Summer School on Aviation Psychology, Graz, Austria.
- Barshi, I., Degani, A., Loukopoulos, L., & Mauro, R. (2007, May). *Between the lab and the field: Analytical methodologies in the study of human capabilities for the sake of reducing human error*. International Symposium on Aviation Psychology, Dayton, Ohio, USA.
- Barshi, I., Degani, A., Loukopoulos, L., & Mauro, R. (2007, April). *Training and Procedures: Issues for the Future*. Southwest Airlines Senior Leaders' Meeting, Tapatio Springs, TX, USA.
- Barshi, I., Mauro, R., Degani, A., & Loukopoulos, L.D. (2006, July). *Understanding human error: Implications for the design of equipment, procedures, and training*. 26<sup>th</sup> International Congress of Applied Psychology, Athens, Greece.
- Loukopoulos, L.D. (2006, June). *Aviation Human Factors, pilot error, and case studies*. International Society of Air Safety Investigators (ISASI) Reachout Seminar, Flight Safety and Accident Prevention, Larnaca, Cyprus.
- Loukopoulos, L.D. (2005, November). *Training for error management in daily flight operations*. 21<sup>st</sup> Airbus Human Factors Symposium, Madrid, Spain.